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# Some remarks on the history of the Khotanese orthography and the Brāhmī script in Khotan

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#### **Abstract:**

The article identifies an early Khotanese orthographic system, the Archaic Orthography to be added to the three well-known later systems used for Old and Late Khotanese. The Archaic Orthography is found in a few Old Khotanese wooden documents and literary manuscripts written in the earliest varieties of the Central Asian Brāhmī script. The article also shows that the Early Turkestan Brāhmī, Type 1, so far believed to have been used only in the northern oases of the Tarim basin, was used also in the south in Khotan and that it is at the basis of the Khotanese Documentary Script. The Khotanese Book Script originated instead as a calligraphic script from the local Early Turkestan Brāhmī script, Type 2, under the steady influence of manuscripts of Mahāyāna texts in North-western Gupta script from Gilgit and Northwest India due to the high consideration the Mahāyānists showed to their religious books, regarded as cultic objects and as a means of proselytism. An appendix discusses the language of a new wooden document in Archaic Orthography and the additional grammatical information it provides.

#### **Keywords:**

Central Asian Brāhmī script, Khotanese orthography, Khotanese Book Script, Khotanese Documentary Script, books in Mahāyāna

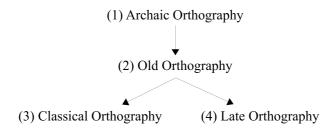
Several Old Khotanese manuscripts—including the recently discovered wooden document 90-YKC-040 from Karadong, the long known wooden documents IOL Khot Wood 4–5 (D.R. 01–02) from Dandan Öilik Rawak and Or. 8211/1474 (Har. 060) probably from the Domoko area, and a few fragments of literary paper manuscripts from Khadaliq and possibly elsewhere—display a peculiar orthography and script type that point to a very early date and make them probably the oldest known specimens of Khotanese.¹ Comparison of them with further Khotanese, Sanskrit, and Tocharian B materials throws new light on the history of the Khotanese orthographic systems, the history of the Brāhmī script in Central Asia, and the origin of the Khotanese Documentary Script.

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#### 1. Orthography

Three orthographic systems are commonly held to have been used for Khotanese: two for Old and one for Late Khotanese.<sup>2</sup> Actually, four distinct systems can be distinguished: (1) the Archaic Orthography, (2) the Old, (3) the Classical, and (4) the Late.<sup>3</sup> They seem to be related in this way:



What I term the Old Orthography is used in some early manuscripts such as those preserving translations of the  $Ś\bar{u}rangamasam\bar{a}dhis\bar{u}tra$ , the  $Vimalak\bar{t}rtinirdeśa$ , the  $Sangh\bar{a}tas\bar{u}tra$  (the four oldest manuscripts), and the  $Ratnak\bar{u}ta$ , which are 'characterised by other features that are clearly archaic'. It contrasts double tt for [t] (as well as for [tt]) and single t for an intervocalic glottal stop [?] or the like, which basically continues earlier \*-t- in genuine Khotanese words. However, it still has single t for both [g] and [t], single t for both the voiceless and the voiced palatal sibilants [t], and single t for both the voiceless and the voiceless stop as opposed to t ... was the first device of this kind to be used in Khotanese'.

A less ambiguous system which can be termed Classical Orthography characterises the greater part of the Old Khotanese literary manuscripts, including the main, seventh- or eight-century manuscript of the *Book of Zambasta* ( $Z_1$ ).<sup>8</sup> It has double gg for [g] but single g for [ $\gamma$ ], double gg for the voiceless palatal and retroflex sibilants [gg] but single gg for their voiced counterparts [gg], and double gg for [gg] or the like.<sup>9</sup>

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<sup>5.</sup> Emmerick 1987: 36.

<sup>2.</sup> See Emmerick 1989: 208, Emmerick and Pulleyblank 1993: 30, 36–37.

Notice that there is no direct correlation between Old Orthography and Old Khotanese or between Late Orthography and Late Khotanese, though the Old Orthography is 'one' of the three systems used to write Old Khotanese and the Late Orthography is basically used in Late Khotanese texts.

See Emmerick 1970 (Śūraṅgamasamādhisūtra); Skjærvø 1986 (Vimalakīrtinirdeśa, partly in Classical Orthgraphy); Canevascini 1993 (Saṅghāṭasūtra); Skjærvø 2003 and Maggi 2015 (Ratnakūṭa).

Single *t* also renders [t] in consonant clusters. For *t* [?] or the like, cf. Bailey 1938b: 589–590 and Emmerick and Pulleyblank 1993: 31, 42–44, who, at least for Late Khotanese, suggest realisations as 'a [w] glide following a rounded vowel' and 'a back unrounded glide marking a break between two syllabic segments' (p. 43). Khotanese *t* between vowels cannot represent [d] (still so Emmerick 1989: 208 and 1992b: 7), since *d* is used at face value as convincingly shown by Emmerick and Pulleyblank 1993: 34, 39 (cf. Sims-Williams 1989: 168). The distribution of Khotanese *tt* [t], intervocalic *t* [?], and *d* [d] is reminiscent of the one found in some varieties of English, including the Far-Western American English dialect, where /t/, /t/ 'intervocalic and before an unstressed vowel', and /d/ are realised as [t], [r] (a voiced alveolar flap), and [d] (see Ladefoged 1999: 43 and the accompanying sample text). Hitch 2015: 683 and 2016: 86–88 still keeps to the values *tt* [t], *t* [d], and *d* [δ] (cf. Emmerick 1981: 185–188, 203).

Emmerick 1989: 208.

See Vorob'ëv-Desjatovskij and Vorob'ëva-Desjatovskaja 1965 and Emmerick 1968.

In the Classical Orthography, also single g after n, and s before voiceless occlusives are used at face value. My Old Orthography and Classical Orthography correspond, thus, to the terms 'Orthography I, II' in SDTV 3.17 (where, however, 'type I' and 'type II' are interchanged by mistake), 'archaic' and 'classical' orthography in Hitch 2015: 663–664, and 'Archaic' and 'Canonical orthography' in Hitch 2016: 11–12.

The Late Orthography is employed in the bulk of the documents from the Khotan region and in all the other Late Khotanese texts from Dunhuang. It is, perhaps surprisingly, not derived from the Classical but seemingly from the Old Orthography. It has double tt for [t] but single  $\dot{s}$  for [ $\dot{s}$ ] and single  $\dot{s}$  for [ $\dot{s}$ ] like the Old. For voiced [ $\dot{s}$ ] and [ $\dot{s}$ ] it has innovated the use of the subscript hook transliterated  $\dot{s}$ , hence  $\dot{s}$  [ $\dot{s}$ ] and  $\dot{s}$  [ $\dot{s}$ ], but  $\dot{s}$  [ $\dot{s}$ ] and  $\dot{s}$  [ $\dot{s}$ ].

In addition to these three long known orthographic systems there was a fourth, still earlier orthography. The wooden document 90-YKC-040, the single document consisting of the two wooden tablets IOL Khot Wood 4 and 5 (henceforth D.R. 01 and 02 for short), the wooden document Or. 8211/1474, and the paper fragments SI P 83.2, IOL Khot 24/9 (Kha. i.124.1), and IOL Khot 24/10 (Kha. i.124.2) from two literary manuscripts on paper present us with substantial traces of this system. Whereas the Old, Classical, and Late Orthographies all distinguish double tt from single t, the aforementioned manuscripts still use single t intervocalically for both [t] and [?]. Since this system is the most ambiguous and is found with the oldest script types (see § 2 below), it must have preceded all the others. I term it Archaic Orthography.<sup>11</sup>

The Late Orthography may descend directly from the Old Orthography. <sup>12</sup> As Dieter Maue suggested to me, not only the Late but also the Classical Orthography may derive independently from the Old Orthography, as is indicated by the different devices that they adopt to distinguish the voiceless and voiced sibilants (subscript hook and doubling respectively). <sup>13</sup>

The conventions of the four orthographic systems of Khotanese are summarised in Table 1.

#### 1.1. 90-YKC-40

The text of the Karadong document 90-YKC-40—a list of goods that mentions domestic animals, weapons, textiles, vessels, and presumably clothing—is short and partly lost. Nevertheless, it is apparent that it is written in good Old Khotanese. Suffice it to mention that it distinguishes accurately short u and long  $\bar{u}$ , which interchange instead in Late Khotanese, and that it preserves the old spellings  $p\bar{a}t$ - in the hapax 9  $p\bar{a}t\bar{u}ye$  'cloaks' and 2 duva 'two' as against their Late Khotanese outcomes py- and dva respectively (cf. the Appendix on the

The Late Orthography does not need double gg since Old Khotanese [γ] is lost in Late Khotanese and single g was sufficient for [g]. In Late Khotanese, [γ] is occasionally found in loanwords, where it is written h: (Emmerick 1981: 204–205, Emmerick and Pulleyblank 1993: 32).

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The paper document issued by Spāta Rramenara as creditor (ed. and trans. Ogihara 2015) is not written in Archaic Orthography, though it has some palaeographically conservative features such as a very old form of  $\tilde{n}a$ , a comparatively conservative shape of ma, and the Central Asian form of independent -e (shared with all stages of the Khotanese Documentary Script, see § 2 below) and though the word  $t\tilde{a}t\tilde{a}$  is found in line 5 of the edition. What Hirotoshi Ogihara reads as  $t\tilde{a}t\tilde{a}$  and interprets as the nominative-accusative plural masculine of the reduplicated demonstrative pronoun ( $t\tilde{a}t\tilde{a}$  in the Old and Classical orthographies) should be actually be read  $n\tilde{a}$   $n\tilde{a}$ . Accordingly, the sentence  $n\tilde{a}$   $n\tilde{a}$  pud $\tilde{a}$  does not mean 'Tāmen hái yǒu qiàn kuǎn wèi fù 他們還有欠款未付 [They († $t\tilde{a}t\tilde{a}$ ) still have outstanding debts]', but presumably 'He [i.e. the debtor Śātsala] did not ( $n\tilde{a}$   $n\tilde{a}$ ) owe (more)' or 'No (more) ( $n\tilde{a}$ ) is owed by them ( $n\tilde{a}$ ) (i.e. Śātsala and the other debtors)'. Archaic Orthography is also ruled out by the double tt in the immediately following  $tt\tilde{a}$  'then'. Likewise, the wooden document Or. 8211/1475 in '[u]ncommon ductus' (ed. and trans. Catalogue 41 with facsimile on pl. 6d; see also Maggi 2019) has very old  $\tilde{n}a$ , as was remarked by Hiroshi Kumamoto in Ogihara 2015: 268, as well as a conservative shape of ma, but it is written in Late Khotanese and contains no instances of voiceless [t], so that it is impossible to determine whether the Archaic Orthography is used in it.

<sup>&</sup>lt;sup>12.</sup> Hitch 2016: 12.

<sup>&</sup>lt;sup>13.</sup> Personal communication of 1 September 2015.

language of 90-YKC-40 and its contribution to our knowledge of Old Khotanese).

The Archaic Orthography with single t representing both [t] (later written tt) and intervocalic [?] can be observed in the so far unattested 8 tasta [tasta:] 'bowls' (< Iranian \*tasta-ka-, cf. New Persian taste 'small basin' etc.) as against 9 patuye [pəʔu:je] 'cloaks' (see the first row in Table 2). Single s is likely to represent voiceless [s] in 6 base 'garments', possibly a loanword from Bactrian \*oabs, direct plural of \*oabo (through Gāndhārī vase) < Iranian \*yastra-, if not directly derived from this. tasta

#### 1.2. D.R. 01-02

The tablets D.R. 01-02 were discovered by Marc A. Stein in the northernmost site of the Dandan Öilik oasis called 'Rawak' and form the bottom and the now fragmentary cover of a single sealed document. 15 Whereas Harold W. Bailey remarked that '[t]he two pieces of wood show the same handwriting, and are in the same dialectal Saka, different from all other Khotan Saka and Tumšug texts', Emmerick commented that this 'statement concerning DR 01 and 02 is in my opinion open to question'. 16 I myself cannot see any reason for Stein dating the Dandan Öilik Rawak document 'probably early in the eighth century', 17 but it is possible that his dating influenced the conclusion drawn by Bailey concerning its dialectal character. In actual fact, the document is not written in an otherwise unknown Saka dialect but essentially in an archaic variety of regular Old Khotanese apart from occasional colloquial forms like hämā (D.R. 01 1) for hämāte third singular present subjunctive middle of häm- 'to be, become'. The reduction observed in hämā is not surprising because such frequent verbs as *häm*- 'to be, become' and *st*- 'to stand; be' are occasionally reduced already in Old Khotanese. On the one hand, the third singular indicative present middle häme for hämäte in Sanghātasūtra 253[71], which occurs in a manuscript (Stein E 1.7 145r1) featuring frequent traces of Old Orthography (undoubled  $\dot{s}$  and  $\dot{s}$ ) alongside strong Late Khotanese influence, may mirror the language of a Late-Khotanese-speaking copyist. 18 On the other hand, however, the third singular indicative present middle ste for stäte in the fifth-century Book of Zambasta 3.102 and 22.283<sup>19</sup> is the form originally used in the Old Khotanese text, as is confirmed by metrics, which requires precisely monosyllabic, one-mora ste (that is, stě). The language variety of the Dandan Öilik Rawak document may look strange at first glance exactly because of the Archaic Orthography used in it and characterised by single t instead of tt and t of the subsequent orthographic systems, which simply points, however, to an early date of the document. Clear instances of t for [t] corresponding to subsequent tt are tagatu

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 $<sup>^{14.}\,</sup>$  See the Appendix below and Maggi, forthcoming  $\S$  3 for details.

<sup>15.</sup> Facsimiles SD 1.xxi; ed. and trans. Catalogue 560–561. See Stein 1907: vol. 1, 305–306 and vol. 2, pl. cvi; cf. Baumer 2003: 76–77, who terms the ruin 'D 1'. This Rawak is not to be confused with the site, also named Rawak, located some 40 km north of the modern city of Hotan (Hetian 和田) and famous for its stūpa (cf. Stein 1907: vol. 1, 482–506).

SDTV 1.43; Emmerick 1969: 401. Cf. Catalogue 560, where the language of the document is described as 'OKhot. (dialect?)'.

<sup>&</sup>lt;sup>17.</sup> Stein 1907: vol. 1, 305.

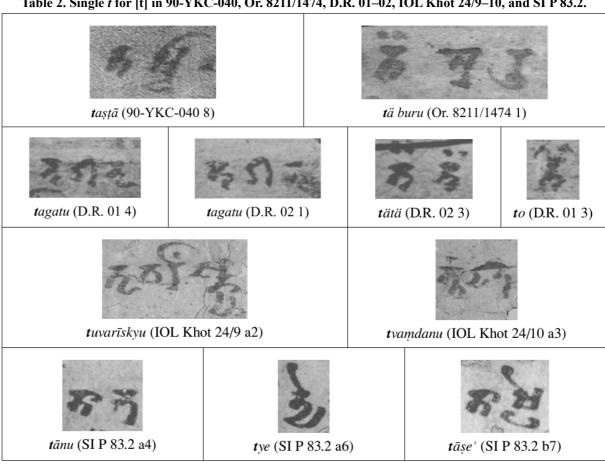
<sup>&</sup>lt;sup>18.</sup> See Canevascini 1993: 110 (ed. and trans.), 239 (manuscript description).

Ed. and trans. Emmerick 1968: 68–69, 332–333. See Maggi 2004 for the fifth-century dating of this text chiefly known from a seventh- or eighth-century manuscript (cf. fn. 8).

Table 1. The Khotanese orthographic systems.

	Archaic Orthography	Old Orthography	Classical Orthography	Late Orthography	
[t]		tt	tt	tt	
[3]	t	t	t	t	
[g]			gg	g	
[γ]	g	g	g	_	
IJ	,	,	śś	Ś	
[3]	Ś	Ś	Ś	ś'	
[§]			ŞŞ	Ş	
[z]	Ş	Ş	Ş	<i>Ş</i> '	

Table 2. Single t for [t] in 90-YKC-040, Or. 8211/1474, D.R. 01-02, IOL Khot 24/9-10, and SI P 83.2.



(D.R. 01 4, D.R. 02 1) accusative singular 'property, wealth' (= Classical Orthography ttagatu), tätä (D.R. 02 3) nominative-accusative plural masculine 'these' (= Classical Orthography ttätä), and, if word division is correct, to (D.R. 01 3; not tto as Bailey and Skjærvø: in the facsimile, t- is deformed by a crack in the wood) accusative singular feminine 'that' (= Classical Orthography *tto*) (see the second row in Table 2).<sup>20</sup>

For the sake of clarity, some spots and most traces of surrounding aksaras have been bleached out, though kept visible, in Tables 2-3.

The Archaic Orthography combines well with the earliest known type of Documentary Script used for writing Khotanese in this document (see § 2) and with some especially conservative linguistic features, which also contribute to lending the document an unusual appearance. For example, from the verb yan- :  $y\ddot{a}da$ - 'to do' we have the first plural present indicative active  $gan\bar{a}mu$  in D.R. 01 1, 2 (= regular  $yan\bar{a}m\ddot{a}$ , with -u for - $\ddot{a}$  < Old Iranian \*-ah by influence of the preceding -m-) and the third singular masculine perfect transitive  $g\ddot{a}de$  in D.R. 01 5, both spelled with ambiguous g, which in this orthography can represent [ $\gamma$ ] as here and [g] as in D.R. 01 2 gamjso accusative singular 'sin' (= Classical Orthography ggamjso). Forms of the verb yan- :  $y\ddot{a}da$ - are now and then spelled with initial g- or gamjso- or t- in Old Khotanese (cf. especially the past participle " $g\ddot{a}da$ - in compounds), but the spellings with gamja- (sometimes even omitted in the third singular present indicative active gamja- prevail decidedly. In contrast, it is significant that the only occurrences of the verb in the short document under consideration both have the conservative initial g- [ $\gamma$ ], which is the expected intermediate stage in the sequence Iranian \*gamja- : gamja- > Old Khotanese gam- : gamja- : gamja-

#### 1.3. Or. 8211/1474

The Old Khotanese wooden document Or. 8211/1474 (Har.  $060)^{24}$  was 'most probably obtained ... from villagers digging in the Domoko area'. That it uses the Archaic Orthography with single t for [t] is clearly revealed from its initial phrase  $t\ddot{a}$  buru 'The following' (= later  $tt\ddot{a}$  buro) (see the first row in Table 2).

#### 1.4. IOL Khot 24/9–10

In his catalogue of the Khotanese manuscripts in the British Library, Prods O. Skjærvø suggested that the St. Petersburg fragment SI P 83.2<sup>26</sup> may be from the same manuscript as the London fragments IOL Khot 24/9 and IOL Khot 24/10, which also stand out on account of their 'peculiar script and unusual orthography'.<sup>27</sup> This is unlikely. Though SI P 83.2 is written in an '[u]nusual script'<sup>28</sup> like IOL Khot 24/9 and 10, the latter display a more orderly layout and a more calligraphic and square ductus than SI P 83.2. The contents are also different: the text in IOL Khot 24/9–10 (actually from one and the same manuscript and accordingly dealt with together) has a more doctrinal character and mentions worship of Buddhist monuments (see below), whereas SI P 83.2 describes a ritual that involves a magic spell (b1 *vidyā*-) and is meant to protect from various evils such as enemies (a1 *sānā*, a4 *sānāņu*), dangerous insects (b2 *prāṇā*), and robbers (b7 *gamuna*). What the London and the

<sup>&</sup>lt;sup>21.</sup> See Degener 1987: 36.

<sup>&</sup>lt;sup>22.</sup> See SGS 110–112.

The development of the present stem of this very frequent multifunctional verb is irregular in Khotanese, where \*r becomes unexpectedly a (cf. SGS 112), as well as in other Iranian languages beginning with Old Persian kunau- (with \*r > u) > Middle Persian kun- > New Persian kon-. In addition, Khotanese yan-displays the development of initial \*k- > y- that is usually found in the middle of a word and contrasts with the normal preservation of original word-initial \*k- > k-.

Ed. and trans. Catalogue 41.

<sup>&</sup>lt;sup>25.</sup> Catalogue xlix (cf. liv).

<sup>&</sup>lt;sup>26.</sup> Facsimile SD 7.59; ed. and trans. SDTV 3.82–83.

Ed. KT 5.146; ed. and trans. Catalogue 222 with facsimile of IOL Khot 24/9 on pl. 6a. Cf. Catalogue lxxi: 'IOL Khot 24/9 ... comes from the same manuscript as SI P 83.2 in the St.-Petersburg collection'.

<sup>&</sup>lt;sup>28.</sup> SDTV 3.82.

St. Petersburg fragments have in common is the Archaic Orthography used in them, as well as the conservative character of their script varieties (see § 2).

That the Archaic Orthography with t for [t] is used in IOL Khot 24/9–10, is immediately clear from 9 a2  $tuvar\bar{t}skyu$  accusative singular feminine 'excess' (= Classical Orthography  $tvar\bar{t}sc\bar{a}$ -). The use of the Archaic Orthography in IOL Khot 24/9–10 is apparently contradicted by 10 a3 ttamda in the available editions, but this is not the case because inspection of a scan of the fragment reveals that the first akṣara is in reality tva and that the passage can be safely read tvamdanu ['who [goes to] a stūpa in reverence', that is, 'who circumambulates a stūpa', with a fairly well preserved tvamdanu 'reverently', instead of Bailey's tvamdanu | and Skjærvø's tvamdanu | who ... a stupa ...' (see the third row in Table 2).

#### 1.5. SI P 83.2

As for SI P 83.2 a clear instance of single t for [t] occurs in a4  $t\bar{a}nu$  [= Classical Orthography ttānu] sānāņu 'of those enemies', left untranslated by Emmerick and Vorob'ëva-Desjatovskaja. The spelling a6 *tye* genitive-dative singular 'for him' (= Classical Orthography ttye) is likewise significant because tye occurs occasionally in Late Khotanese but is never found in Old Khotanese in Old or Classical Orthography. A further instance of single t for [t] is  $t\bar{a}se$ ' nominative-accusative plural 'thieves' (= Classical Orthography  $tt\bar{a}se$ ')<sup>31</sup> to be read instead of the untranslated  $n\bar{a}$  se' of the edition in b7  $t\bar{a}$ se' gamuna 'thieves (and) robbers' (for tā cf. a4 tānu and contrast na in b7 gamuna) (see the fourth row in Table 2 for t- and Table 3 for gamuna). Also relevant because of its conservative phonology—comparable with ganāmu and gäde with initial g [ $\gamma$ ] in D.R. 01 discussed above—is a7 gīndi third singular indicative active of yan- 'to do' (= Classical Orthography yīndä). Emmerick and Vorob'ëva-Desjatovskaja tentatively read this as āndi and commented on the shape and reading of the first akṣara, but they could not translate the word. 32 The reading gīndi provides a well-known verbal form<sup>33</sup> and is assured by comparison—summarised in Table 3—of  $ga \sim g\bar{\imath}$  (b7 gamuna 'robbers', a7 gīndi 'does') with  $pa \sim p\bar{\imath}$  (a3 parāhä 'restraint', a1 pīme 'measures [?]'),  $va \sim$  $v\bar{i}$  (a8 varä 'there', b5  $v\bar{i}ri$  'in'), and  $sa \sim s\bar{i}$  (b5 savo 'night', b4  $s\bar{i}$  'this [?]').

## 1.6. Archaic Orthography, new signs, and Khotanese digraphs

It is noteworthy that the Archaic Orthography displayed by 90-YKC-040, D.R. 01–02, Or. 8211/1474, Khot 24/9–10, and SI P 83.2 makes no use of tt but already knows the new signs  $\ddot{a}$  [ə], ei [aə], rr, the subscript hook ( '), and the digraphs ky [ $k^{i}$ ], js [dz], tc [ts], and possibly ts [tsh] that are unknown to the Indian model and were introduced to represent special Khotanese sounds. <sup>34</sup> Unfortunately, there are no instances of gy [gi] and ys [z]. That the

See Degener 1989: 156 and the translation of *Avalokiteśvaradhāraṇī* 5v5 and 16r5–v1 in SDTV 3.239 and 246.

<sup>&</sup>lt;sup>30.</sup> Dict. 145 s.v.

See Dict. 126–127 s.v. *ttāṣe* '.

SDTV 3.83: 'it seems difficult to read the  $\bar{a}$  of  $\bar{a}ndi$  as anything else, which would mean that two different forms of  $\bar{a}$  were used in the same text'.

See for instance Emmerick 1970: 128 and Skjærvø 2004: vol. 2, 328, both s.v. yan-.

ei only in D.R. 01–02; tc only in Or. 8211/1474 and SI P 83.2; ts only in D.R. 01 4 tsvā but uncertain; rr, subscript hook, and js only in Or. 8211/1474, D.R. 01–02, and SI P 83.2; ky only in D.R. 01–02 and IOL Khot 24/9–10. Cf. Emmerick 1989: 209 for the phonological values; see Emmerick 1992a: 162–166 for the

Table 3. Dependent  $-\overline{\iota}$  and ph in SI P 83.2.

	ga	pa	pha	va	şа
-a -ä	b7 <b>ga</b> muna	a3 <b>pa</b> rāhä	a2 phäsgä	a8 varä	b5 <i>şavo</i>
- ī	a7 gīndi	al pīmę		b5 vīri	a4 şī

Archaic Orthography already had the digraph gy available is implied by the occurrence of its voiceless counterpart ky. As for vs, the hapax phäsgä in SI P 83.2 a2 (misread as häsgä and left untranslated in the edition, but displaying a closed loop contrasting with the open loop of ha in a3 parāhä: see the fourth and third columns in Table 3), which probably means 'urine' and is the same word as the prior element in Late Khotanese phiysgāna- 'urinary bladder'  $(< ph\ddot{a}ysga - + *\circ d\bar{a}na$  'container, receptacle'), 35 seems to suggest that the digraph ys [z] was not used in the Archaic Orthography. This is unlikely, however, because ys for [z] is an orthographic device already current in the Brāhmī script of western and north-western India in the early centuries of the Christian era. It was employed for writing the Iranian names ysamotika- and dāmaysada- on coins of the Western Ksatrapa dynasty of Ujjain (western Madhya Pradesh) in the late first and early second centuries AD, 36 koysana- and koysiya- on coins of the Pāratarāja dynasty in the third-century (?) Loralai area (north-eastern Balochistan),<sup>37</sup> and *avariysa*- on a seal of an unidentified king possibly from the central areas of third-century northern India.<sup>38</sup> It was then adopted as the akṣara ysa occurring in the Sanskrit versions in Brāhmī script of the Arapacana syllabary of the Buddhists. The Arapacana is a list of aksaras serving as abbreviations of key words relating to points of doctrine. It is thought to have been originally devised in the Gandhari language and the Kharoṣṭhī script in Gandhāra during the Kuṣāṇa period. The akṣara ysa in the Brāhmī Arapacana was presumably borrowed from a Kharosthī akṣara used to render Gāndhārī [z] or a similar sound which was 'native to the language itself, not just used in loan words', though 'unfortunately none of the extant partial Kharosthī Arapacanas contain this letter'. <sup>39</sup> Since it is unlikely that such a peculiar device, already well established in the usage of Brāhmī in north-western India, was again invented independently in Central Asia, the Khotanese must

subscript hook in Old Khotanese and Emmerick 1998 for ei.

<sup>35.</sup> Cf. Dict. 262 s.v. phivsgāna-.

See the groundbreaking article by Lüders 1913: 406–408, 413 and Harmatta 1989: 303 for possible etymologies.

See Tandon 2009: 140, 152–155, 158–159 and cf. Falk 2007: 174–178 (who transliterates the names in Kharoṣṭhī script as *kożana* and *kożiya* and the latter in Brāhmī as *koyxiya*, with an undetermined x for the subscript letter 'too worn to be identified', p. 176).

<sup>38.</sup> Sircar 1965–1966: 278–279 and Salomon 1990: 257 n. 6.

Salomon 1990: 257–258, 269 (quotation) with further, complete references.

have borrowed it along with the Brāhmī script itself.<sup>40</sup> In *phäsgä*, s may have been used improperly instead of ys as an occasional rendering of [z] in a consonant cluster whose voiced character was anyway assured by g[g]. The absence of other words containing ys[z] in the few manuscript remains unmistakably written in Archaic Orthography is due to mere chance.

To sum up, the wooden documents 90-YKC-040, D.R. 01–02, and Or. 8211/1474 and the paper manuscript fragments SI P 83.2 and IOL Khot 24/9–10 combine the Archaic Orthography with the use of the oldest varieties of the Brāhmī script found in Khotanese manuscripts, as we shall see presently, and with a conservative language, as we have seen (only the scanty remains of IOL Khot 24/9–10 do not display any specifically conservative linguistic features).

The very existence of the Archaic Orthography and its use of single t for [t] jointly with the new signs and devices shows that Emmerick was right when, on account of the consideration that 'k is not used to render [g]', surmised that 'the Khotanese practice of using tt for [t] and t for [d] may be an inner-Khotanese affair'. Moreover, the manuscripts in Archaic Orthography under consideration attest to the short-lived period with single t for voiceless [t], 'when the script was first borrowed for Khotanese with few modifications', as Douglas A. Hitch postulated recently. Douglas A. Hitch postulated recently.

## 2. Palaeography

For writing their language, the Khotanese used various forms of a Central Asian development of the Indian Brāhmī script. The various forms may be grouped under the general labels Book Script and Documentary Script (usually referred to as Formal and Cursive). The Book and Documentary Scripts evolved virtually independently from each other and were basically reserved for different uses: the Book Script was limited to literary texts, including Sanskrit ones, apart from early occasional use in documents (see below); the Documentary Script was employed in the first place for documents and everyday writing, though late use for literary texts is not unusual.<sup>43</sup>

The script used in the Karadong document 90-YKC-40 contributes new information on the history of the Khotanese Brāhmī script, as it is a very careful script closely connected with and much the same as the Early Turkestan Brāhmī Type 1 (alphabet r), which is otherwise known chiefly from manuscripts produced in the northern oases of the Tarim basin.<sup>44</sup>

Different types of a local script are individuated partly by the form of characteristic letters which undergo changes in time and may be used for relative dating. One of the most significant characteristic letters in the history of the Central Asian Brāhmī scripts is the akṣara ma, a clear instance of which is found in the Karadong document ( $\checkmark$  in 7 namate).

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<sup>&</sup>lt;sup>40.</sup> Lüders 1913: 408–409 (differently Hitch 1984: 190–197).

<sup>&</sup>lt;sup>41.</sup> Emmerick 1989: 208. See fn. 6 for *t* representing [?] or the like.

<sup>&</sup>lt;sup>42.</sup> Hitch 2015: 683 under 'Row 3'.

Frods O. Skjærvø's observations reveal the inadequacy of the terms 'formal' and 'cursive' for the Khotanese script varieties), and Dragoni 2017: 395–396 for a quick survey of the varieties of Khotanese Brāhmī.

Alphabets identified by a letter and given in parentheses as equivalents of the script types refer to the usage in the standard work by Sander 1968 on the palaeography of the Indian scripts of the Brāhmī family in the Sanskrit manuscripts recovered by the German Turfan expeditions in Central Asia.

This ma and the virtually identical instances of ma ( $\checkmark$ ) in the early wooden document D.R. 01–02 from Dandan Öilik Rawak, whose archaic language and orthography have been considered above (§ 1.2), have their closest matches in the ma ( $\checkmark$   $\checkmark$  ) of the script called Early Turkestan Brāhmī Type 1 (alphabet r) in Lore Sander's well-thought-out terminology and used in the northern oases of the Tarim basin for writing Sanskrit manuscripts. This shape of the akṣara ma lies at the very origin of the development of the akṣara in the Khotanese Documentary Script. Taking into account the shapes of ma in select documents up to the tenth century and arranging them diachronically on the basis of their correlation with different language stages and orthography types (the Classical Orthography of Old Khotanese being never found in manuscripts in Documentary Script), one observes that the mid-left stroke of the earliest documents rises gradually to join the top of the right vertical stroke and becomes more and more flattened, and that the vertical stroke and its leftward prolongation are in the end squared off (see Table 4). 45

Nos. [1–2] are the earliest attested forms of Khotanese Documentary ma and significantly occur in Old Khotanese documents in Archaic Orthography. No. [3] is a transitional form of Documentary ma found in the document IOL Khot Wood 8 (F II.i.007) written in Old Khotanese and presumably Old Orthography, as is suggested by the spellings 1, 3 ttu accusative masculine 'that' beside 2  $\dot{s}\bar{u}rad\bar{v}\dot{v}ana$  (with single  $\dot{s}$ ) instrumental-ablative masculine of a personal name ultimately from Sanskrit  $\dot{s}\bar{u}radeva$ - (= Classical Orthography ttu and  $\dot{s}\dot{s}\bar{u}ra^{\circ}$ ). Nos. [4–6] and [7–8] are taken almost randomly from the great number of Late Khotanese manuscripts in Documentary Script and Late Orthography from eighth-century Khotan and tenth-century Dunhuang respectively.

For the sake of comparison, the different shapes and the development of ma in the Khotanese Book Script—a local continuation of the script called Turkestan Gupta (alphabet q)—are given in Table 5.<sup>48</sup>

<sup>45.</sup> In Table 4, signatures are followed by the numbers of the lines from which the akṣaras are taken. The akṣaras of Early Turkestan Brāhmī Type 1 (alphabet r; ETB 1 for short; also termed Type a, e.g. in Sander 2013: 290) are taken from SHT 52a v2−3, ed. and facsimile Waldschmidt 1965: 35, pl. 21 (fragments are misaligned in the facsimile). The sharp-cornered akṣara in Sander 1968: pl. 30 (alphabet r) has a somewhat unusual appearance. References for Khotanese manuscripts other than the Karadong and Dandan Öilik Rawak documents (see fnn. 1 and 15) are: IOL Khot Wood 8, ed. and trans. Catalogue 561−562; Hedin 33, 52, facsimiles SD 1.i−ii, ed. and trans. KT 4.41, 46, 146, 157; Or. 6395/1, facsimile SD 1.xxvii, ed. and trans. Catalogue 6−7; P 2801, ed. KT 3.65−68; P 4099, ed. KBT 113−135. Eighth-century variants with a rightward tail such as (Hedin 71 a1, facsimile SD 1.iii, ed. and trans. KT 4.50, 169) are occasionally found.

Unfortunately, this document has no instance of single  $\dot{s}$  or  $\dot{s}$  for the voiced sibilants [3] and [z] that would definitely rule out Late Orthography (where  $\dot{s}$ ) [5] and  $\dot{s}$ , [2] are used).

The paper document of no. [6] can be dated to the year 788 AD in the reign of King Viśa' Vāham (see Zhang and Rong 2008 and cf. Kumamoto 2008); an eighth-century date is also problable for the Hedin wooden documents. The akṣara *ma* has a slightly more conservative form in a group of Chinese-Khotanese wooden tallies from the year 722 AD (see Rong and Wen 2008 with facsimiles).

See Sander 2005: 135–141 with tables 1–2 and references to earlier literature. See also Sander 1989: 113–116 for the dating of the script types adopted here. The Early Turkestan Brāhmī Type 2 (alphabet s)— which distinguishes subtypes 2.1 with round ductus and 2.2 with square ductus (Sander 2005: 137–138)—is termed Early Turkestan Brāhmī Type b in Sander 1984 and elsewhere (for instance, Sander 2013: 290). The Gupta akṣaras in Table 5 are taken from Sander 1968: pls. 10 (Indian Gupta, alphabets h–k) and 30 (Turkestan Gupta, alphabet r); the three following examples of *ma* are taken from Sander's unpublished study of the Khotanese Book Script (Early Turkestan Brāhmī Type 2 from IOL Khot 4/1 [D. iii.1] 8r2, facsimile Stein 1907: vol. 2, pl. cx, ed. Catalogue 168–169; Early South Turkestan Brāhmī from Or. 9609A2/1 3r1 *mam*, ed. Catalogue 71; South Turkestan Brāhmī from SI P 6 [Z<sub>1</sub>] 256v3, facsimile Vorob'ëv-

Table 4. Origin and development of Khotanese Documentary Script ma.

KKK	Ŋ	J	9	4	4	7	77	ココ	
SHT 52a	90-YKC-	D.R. 02	IOL Khot	Hedin 33	Hedin 52	Or. 6395/1	P 2801	P 4099	
v2-3	040 7	1	Wood 8 3	a1	1	22	15, 19	196, 197	
[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	
ETB 1	Archaic		Old			Late	•		
(alphabet r)	Orthography		Orthography	Orthography					
Sanskrit	skrit Old Khotanese				Late Khotanese				

Table 5. Origin and development of Khotanese Book Script ma.

दी अ स	<sup>놟</sup> st	31	শ	<b>4</b> 7	थ	
Late Indian Turkestan		Early Turkestan	Early South	South Turkestan	Late South	
Gupta, Gupta,		Brāhmī Type 2,	Turkestan Brāhmī, Brāhmī,		Turkestan Brāhmī,	
4th–6th c. 4th–5th c.		5th–6th c.	6th–7th c.	7th–9th c.	9th-10th c.	
(alphabets h–k) (alphabet q)		(alphabet s)				
Sansk	crit	Sanskrit and Khotanese				

Table 6. Development of ma in Tocharian B manuscripts.

21	22	SI,	ä	g	9	Ħ	4	æ
THT 1520	THT 2678	THT 2668	THT 273-	THT 1661	Endere	Kucha	THT 133	Standard North
	+ 3971	ff.	275, 248	f.			ff., 1174	Turkestan Brāhmī,
								from about 600 AD
'most archaic' MSS			'middle archaic' and 'early common archaic' MSS					(alphabets t-u)

The shape of archaic *ma* in the Karadong and Dandan Öilik Rawak documents differs from that in all varieties of the Khotanese Book Script and corresponds, instead, to the akṣara shape found in the aforementioned Early Turkestan Brāhmī Type 1 (alphabet r). The latter type also developed from the Turkestan Gupta (alphabet q) but independently from the Khotanese Book Script. Early Turkestan Brāhmī Type 1 was used in the north not only in Sanskrit manuscripts, but also in the Tocharian B manuscripts termed 'middle archaic' by Melanie Malzahn (especially THT 273–275 and 248). However, the Khotanese and Tocharian subsequent developments differ because the Tocharian *ma*, unlike the corresponding

Desjatovskij and Vorob'ëva-Desjatovskaja 1965: 209, ed. Emmerick 1968: 198); the Late South Turkestan Brāhmī *ma* is taken from Ch. ii.002 18r1 (facsimile Bailey 1938a: 21, ed. KT 1.28). See Sander 1989: 117–118 on a possible proto-Śāradā influence on Late South Turkestan Brāhmī *ma*.

Khotanese Documentary akṣara, squares off the mid-left stroke and in the end closes the gap between it and the top of the right vertical stroke to reach the shape in the standard North Turkestan Brāhmī (alphabets t–u) (see Table 6).<sup>49</sup>

Sander has put forward the idea that the characteristic letters of the Khotanese Documentary Script which differ in form from the ones of the Book Script but have counterparts in early Tocharian manuscripts—that is, ma, independent a, and Central Asian dependent a bent to the right —suggest 'that the Brāhmī script may have been introduced into Khotan from the north at about the same time that they first occurred in Tokharian manuscripts ... between the 4th and 5th centuries, the same time that the Kharoṣṭhī script ceased to be used elsewhere'. This seems to find confirmation especially in the script of the Karadong and Dandan Öilik Rawak documents, but implies that script types older than the Early Turkestan Brāhmī Type 2 (alphabet s)—which developed locally from the Turkestan Gupta (alphabet q) —were used only in the north and not in the south. Actually, in Sander's opinion the earliest manuscripts from Khotan are '[a]ll ... written in that type [i.e., Type 2 (alphabet s)] of "Early Turkestan Brāhmī" which preceded the "Early South Turkestan Brāhmī", 'cannot be dated before the fifth, and more probably the sixth, century', and pose 'a problem yet to be solved' on account of their comparatively late dating on palaeographic evidence. <sup>53</sup>

However, the southern script landscape preceding the Early Turkestan Brāhmī Type 2 (alphabet s) is no longer so desolate since Klaus Wille pointed out that previous script types are attested also in several Sanskrit manuscripts from the south:<sup>54</sup> In particular:

- 1. a transitional script between the late Indian Gupta (alphabet k) and the Gilgit/Bāmiyān Type I (about fifth century?)<sup>55</sup> is found not only in
  - 1a. the birch bark manuscript Kha. ii.3 etc. (Or. 8212/103A) from Khadalik containing passages from the *Saṃyuktāgama*, which was probably imported from Gilgit,<sup>56</sup> but also and more significantly in
  - 1b. the wooden tablet F.i.a.1 from Farhad-Beg-yailaki that 'must have been inscribed locally', as it contains the account of a protective mantra proclaimed by Vaiśramaṇa, 'composed indubitably in Chinese Turkestan, where Vaiśramaṇa was the chief

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<sup>49.</sup> See Malzahn 2007: 259–260, 275–276, 296–297 (table of characteristic letters). I rely entirely on the information provided by Malzahn and give detailed manuscript numbers only for THT 273–275 and 248, that are of special interest in connection with the Khotanese akṣara. According to Tamai 2011: xxiv–xxv, Malzahn's 'most archaic' and 'middle archaic' manuscripts correspond together to period 'I-1' in his classification, while her 'early and late common archaic' manuscripts correspond to his period 'I-2'. The 'most archaic' forms still resemble the Gupta shapes (cf. Table 5), as remarked by Malzahn 2007: 276, though the top of the left stroke already points inwards instead of outwards, as Sander 2013: 293–295 notices with regard to the even earlier, pre-fifth-century Tocharian ma in fragment Toch 610 (THT 4122; akṣara obtained by removing the diacritic in a4 mä). For the beginnings of standard North Turkestan Brāhmī (alphabet t) at the turn of the seventh century see Sander 1968: 47 n. 201 and 2013: 284–285, Malzahn 2007: 257–258, 277–278, and Tamai 2011: 371 (II-1), 416.

Unlike the Indian diacritic, which is entirely bent to the left, including the tip, the Central Asian -e is infrequently bent entirely to the right, but is usually a leftward diacritic, whose tip only is bent to the right.

Sander 2005: 134. As an example of Khotanese Documentary *ma*, she refers to the comparatively late document Hedin 33 a1 (see here no. [4] in Table 4).

<sup>&</sup>lt;sup>52.</sup> Cf. Table 5 and fn. 48.

<sup>53.</sup> Sander 1999: 95.

<sup>&</sup>lt;sup>54.</sup> Wille 2009: 28–29.

<sup>55.</sup> Cf. Sander 1968: 123, who suggests tentatively a sixth-century date for the Gilgit/Bāmiyān Type I.

Ed. de La Vallée Poussin 1913.

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- 2. a transitional script between the late Indian Gupta (alphabet 1)<sup>58</sup> and the Turkestan Gupta (alphabet q) is found in
  - 2a. the Suvarṇabhāsottamasūtra fragment H 144 SB 75 (Or. 15010/62),59
  - 2b. the Upasampadājñapti (?) fragment H 143 SC 34 (Or. 15010/90), 60 and
  - 2c. the small unnumbered *Saddharmapuṇḍarīkasūtra* fragment in H 149 Add (Or. 15009/274),<sup>61</sup> all from the Khotan area; and, finally,
- 3. the Turkestan Gupta script (alphabet q, fourth-fifth centuries) is used in
  - 3a. the Śārdūlakarṇāvadāna fragment Hoernle 143 SA 20 (Or. 15010/6)<sup>62</sup> and
  - 3b. the not yet identified fragment H 143 SB 67 (Or. 15010/34),<sup>63</sup> both from the Khotan area, as well as in
  - 3c. a folio from Charkhlik containing a buddhastotra parallel to Mātrceṭa's *Prasāda-pratibhodbhava*.<sup>64</sup>

It is probably significant that several of these very early fragments from the southern oases contain Mahāyāna texts (*Suvarṇabhāsottamasūtra*, *Saddharmapuṇḍarīkasūtra*, and a mantra) and texts that are not specifically Śrāvakayāna (*Śārdūlakarṇāvadāna* and a buddhastotra). This agrees with the predominant position of the Mahāyāna in Khotan at least from the end of the fourth century, as is witnessed expressly by the Chinese Buddhist traveller Faxian who spent three months in Khotan in 401 AD, and presumably earlier.<sup>65</sup>

Under these circumstances, it is conceivable that a common and, so to speak, spontaneous development caused the Turkestan Gupta (alphabet q), in the north and the south as well, to evolve initially into the Early Turkestan Brāhmī Type 1 (alphabet r), which was used as a general-purpose script in Sanskrit and Tocharian manuscripts in the north, but specialised as a documentary script in the south. Such specialisation is attested in the Karadong and Dandan Öilik Rawak documents and is confirmed by the continuation of this script type into the Khotanese Documentary Script (usually called Cursive). However, in the south the Documentary Script was used concurrently with the more conservative and accurate Early Turkestan Brāhmī Type 2 (alphabet s), a formal book script essentially reserved for literary, that is, religious manuscripts.

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<sup>&</sup>lt;sup>57.</sup> Ed. and trans. Thomas 1954: 678–679 (quotations from p. 679), facsimile of side a Stein 1921: vol. 4, cli. On the importance of Vaiśramaṇa in Khotan see Filigenzi and Maggi 2008 with references. Vaiśramaṇa is the variant form of the deity's name in Khotanese and other languages for standard Sanskrit Vaiśravaṇa: see Bailey 1942: 912.

<sup>58.</sup> See Sander 1968: 138–141, 148–154, pls. 21–26.

<sup>&</sup>lt;sup>59.</sup> Facsimile Karashima and Wille 2009: vol. 2.2, 267, ed. Skjærvø 2009: 600–603.

<sup>&</sup>lt;sup>60.</sup> Facsimile Karashima and Wille 2009: vol. 2.2, 293–294, ed. Karashima 2009: 464–466.

Facsimile Karashima and Wille 2009: vol. 2.2, 171, ed. Nagashima 2009: 275–276.

<sup>&</sup>lt;sup>62.</sup> Facsimile Karashima and Wille 2009: vol. 2.2, 208, ed. Karashima 2009: 338–340.

<sup>63.</sup> Facsimile Karashima and Wille 2009: vol. 2.2, 234, ed. Karashima 2009: 382.

Ed., facsimile, and trans. Salomon and Cox 1988: 141–145; ed., identification, and trans. Hartmann 1988: 88–92. — It is not certain whether some fifty tiny fragments in Turkestan Gupta (alphabet q) in the Hoernle collection also come from the Khotan area: cf. Wille 2015a: 13 with n. 1 (twenty fragments of non-Mahāyāna texts in Or. 15007) and Wille 2015b: 485 with n. 2 (thirty-three unidentified fragments in Or. 15015). In his Catalogue, Skjærvø describes the small fragments IOL Khot 195/22–27, which remain unpublished, as 'Tokharian' (p. xxxi), 'Tokh.?' (p. 437), and 'Northern Brāhmī' (p. 608), but no information on their provenance seems to be available.

<sup>65.</sup> See Zürcher 2007: 62.

While the Early Turkestan Brāhmī Type 2, as a book script, evolved into the later Khotanese calligraphic varieties, the Early Turkestan Brāhmī Type 1 was at the basis of the later Khotanese documentary varieties, as the different developments of the akṣara *ma* exemplify. This confirms that the Khotanese Documentary Script is not a development of the Book Script.<sup>66</sup>

The Book Script, although originating from the Turkestan Gupta (alphabet q) like the Documentary Script, presumably underwent the steady influence of manuscripts of Mahāyāna texts in North-western Gupta from Gilgit and Northwest India and evolved into the more and more calligraphic later varieties of the Khotanese Book Script. As Sander herself remarks,

[t]he neatly written [literary] manuscripts from the Southern Route ... tend to be more calligraphic. This is less obvious in older manuscripts, but becomes quite apparent in the later ones. This calligraphic tendency is one of the main criteria for grouping the manuscripts. It agrees well with the fact that the formal Brāhmī of the Southern Route is clearly set apart from the cursive script, which is not the case with the script of the Tokharian manuscripts.<sup>67</sup>

A possible reason for the calligraphic tendency and the rise of the Book Script in Khotan may well be seen in the Mahāyāna culture of fifth-century Khotan, 68 which contrasted with the persistence of conservative Buddhism in the northern oases. The Mahāyānists showed high consideration to their religious books, which they regarded as cultic objects and used as a means of proselytism. Mahāyānist culture entailed 'social networks built around the production and preservation of the texts'. 69 In early Khotan—where no other literary manuscripts are known apart from Buddhist ones—the increasingly calligraphic Khotanese Book Script, beginning with the accurate Early Turkestan Brāhmī Type 2 (alphabet s), contributed to characterise religious books as vehicles of religious teaching, as cultic objects, and as a means of proselytism by making them stand out in comparison to documents in the Early Turkestan Brāhmī Type 1 (alphabet r) and its more and more cursive continuations. One can easily imagine that, in connection with donations aimed at having manuscripts copied for the sake of merit making, calligraphy not only enhanced the books as religious objects, but also rewarded the donors through their material beauty employed in the service of religion. It is significant that the Early Turkestan Brāhmī Type 2 (alphabet s), that is, the initial stage of the southern Book Script, is only rarely found in documents: it is used in the wooden documents IOL Khot Wood 6 (F II.i.1), 70 Or. 8211/145571 (subtype 2.1 with round ductus), IOL Khot Wood 7 (F II.i.006), 72 Or. 8211/1474 (see § 1.3), and Or. 8211/147973 (subtype 2.2 with square ductus). While it is impossible to determine the orthography type of

<sup>66.</sup> Cf. Dragoni 2017: 395.

Sander 2005: 137; cf. Sander 1968: 182. Skjærvø aptly refers to the Khotanese Book Script as '"sūtra" script' and comments that '[script] varieties that are unusual in Khotanese texts ... may be local, rather than calligraphic ..., notably, IOL Khot 24/9 ... [and] SI P 83.2' (Catalogue lxxi). In reality, it is the calligraphic varieties that are 'local'.

See Martini 2013.

See Schopen 1975: von Hinüber 1983: 52–56 (on Gilgit and Khotan), Harrison 2003 (quotation from p. 144), Hartmann 2009: 103–104, and Apple 2014.

Ed. and trans. Catalogue 561.

<sup>71.</sup> Ed. and trans. Catalogue 39 with facsimile of the reverse on pl. 4f.

Facsimile SD 4.lxxv, ed. and trans. Catalogue 561.

Ed. and trans. Catalogue 42.

Or. 8211/1455 and 1479, the documents IOL Khot Wood 6 and 7 already use the Old Orthography (tt = [t])<sup>74</sup> and must, thus, be later than the Karadong, Dandan Öilik Rawak, and Domoko (?) wooden documents in Archaic Orthography (t = [t] and [?]) discussed above (§ 1.1–3). It is also remarkable that SI P 83.2 and IOL Khot 24/9–10, the only two unmistakably literary manuscripts written in Archaic Orthography, are written in very conservative varieties of the Early Turkestan Brāhmī Type 2.1 (square ductus) still close to the Turkestan Gupta script (alphabet q) apart from the Central Asian -e and -ai bent to the right (a comparable script variety is found in IOL Khot 216/13 [Kha. i.223b]<sup>75</sup> but it is impossible to ascertain whether this is in Archaic Orthography).

It may be noted that the increasingly calligraphic nature of the Khotanese Book Script is paralleled by the increasing care the Khotanese put in the production of manuscripts of the Book of Zambasta. Though largely based on Indian sources, this Mahāyāna didactic poem in Old Khotanese is an original composition and may be regarded as a sort of national religious poem on account of the great popularity it enjoyed in ancient Khotan, as is revealed by the many fragments belonging to a number of variant manuscripts. The comparatively well preserved but dismembered main manuscript  $Z_1$ , <sup>76</sup> datable to the seventh or eighth century, and virtually all the fragments from other manuscripts of the Book of Zambasta have one manuscript line for each single verse and divide it into four equal sections that generally correspond to the four metrical subdivisions (pāda) of a verse, so that the text looks arranged in four columns. Such an arrangement is a refined imitation and development of a model provided by early manuscripts of religious poetry in Gāndhārī in Kharosthī script, including the so-called Khotan Dharmapada manuscript produced between the first and the third century,<sup>77</sup> and in Sanskrit in Brāhmī script from Central Asia, including the Charkhlik folio mentioned above. <sup>78</sup> However, the oldest known manuscript remnant of the *Book of Zambasta*, that is, the folio bi 33 (T III S 16) in Early Turkestan Brāhmī Type 2 (alphabet s, fifth to sixth century) of the Berlin Turfan collection, still does not have the full-fledged ornate division into four columns of the later manuscripts, but only aligns vertically the beginning of the third pāda of each line and separates the first and second pādas in correspondence with the string hole and occasionally elsewhere.<sup>79</sup>

The coexistence of a Documentary and a Book Script that differentiated locally in time explains their shared features in the early stages better than a scarcely motivated northern influence. Most particularly, the Central Asian dependent -e, -ai, and -au diacritics bent to the right prevail decidedly over the conservative, Indian diacritics bent to the left in the Karadong tablet and the Dandan Öilik Rawak document (Karadong: five Central Asian -e; Dandan Öilik Rawak: fourteen Central Asian but only two Indian -e, one Central Asian -ai) and become the norm in the later manuscripts in Documentary Script. In contrast, in the Book Script varieties, the Central Asian diacritics alternate with the Indian ones in the Early Turkestan Brāhmī Type 2 (alphabet s) and the Early South Turkestan Brāhmī, but become rare in the South Turkestan

That they are written in Late Orthography is unlikely (cf. fn. 46).

Ed. and trans. Catalogue 469–470.

<sup>&</sup>lt;sup>76.</sup> Cf. Emmerick 1968: xii-xiv on the present whereabouts of most of the folios belonging to it and U. Sims-Williams 2017: 287 on two additional unpublished folios in private possession.

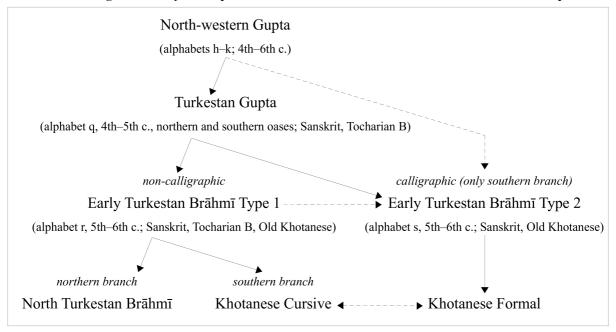
For the dating see Fussman 1989: 436–438.

<sup>&</sup>lt;sup>78.</sup> Cf. fn. 64.

<sup>&</sup>lt;sup>79.</sup> See Maggi 2004: 187 for details and references on the Indian antecedents of the metrical arrangement in writing (see now especially Scherrer-Schaub 2017).

Brāhmī, and are abandoned completely in the Late South Turkestan Brāhmī.<sup>80</sup> The development outlined above is summarised in Table 7.<sup>81</sup>

Table 7. Origin and early development of the northern and southern Turkestan Brāhmī scripts.



The documents 90-YKC-040 from Karadong and D.R. 01–02 from Dandan Öilik Rawak may be approximately dated by their use of the Early Turkestan Brāhmī Type 1 (alphabet r) with an archaic shape of *ma* that lies at the very beginning of the akṣara evolution in the Khotanese Documentary Script, by their conservative language, and, above all, by their Archaic Orthography. These all point to a comparatively great antiquity, possibly around the beginning of the fifth century at the latest. An early date is also suggested by peculiarities that these documents share with Gāndhārī commercial documents in Kharoṣṭhī from Niya such as, for the Karadong document, an arrangement into columns and numbers written in both figures and words and, for the Dandan Öilik Rawak document, the form itself of a wooden document consisting of a covering tablet and an undertablet.<sup>82</sup>

#### **Appendix**

Notes on the language of the Karadong document 90-YKC-040

#### Phonology

The prefix  $p\ddot{a}t$ - in 9  $p\ddot{a}t\bar{u}ye$  'cloaks' (< Iranian \*pati- $gaud\bar{a}$ -, cf. Sogdian  $pt\gamma(\dot{})w\delta$  'cover, covering') decidedly reminds one of the Old Khotanese rather than the Late Khotanese forms of such words as Old Khotanese  $p\ddot{a}t\bar{a}y$ - :  $p\ddot{a}t\bar{a}sta$ - > Late Khotanese  $py\bar{a}y$ - :  $py\bar{a}sta$ - 'to speak', Old Khotanese  $p\ddot{a}t\bar{a}ly\bar{a}$ - > Late Khotanese  $py\bar{a}ly\bar{a}$ - 'prosperity', or Old Khotanese

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<sup>80.</sup> See Sander 2005: 138–140.

In Table 7, unbroken arrows indicate derivation; dashed arrows indicate influence. Cf. Sander 2005: 135 table 1

<sup>&</sup>lt;sup>82.</sup> Cf. the facsimiles of the Khotanese document in SD 1 xxi and of some Kharoṣṭhī documents in the plates of Boyer et al. 1920–1929.

 $p\ddot{a}taunda$ - > Late Khotanese pyauda- 'confounded', <sup>83</sup> and is more conservative than the common Old Khotanese verb  $py\bar{u}\dot{s}$ - :  $py\bar{u}\dot{s}ta$ - 'to hear' (< Iranian \*pati- $gau\dot{s}a$ -), which, contrary to what one might expect, is never spelled \* $p\ddot{a}t\bar{u}\dot{s}$ -. <sup>84</sup>

2 duva 'two' is similarly conservative as against the later dva which begins to surface in Old Khotanese and becomes exclusive in Late Khotanese. As a term of comparison, it may be mentioned that the Old Khotanese Book of Zambasta has seven occurrences of duva, one of the virtually equivalent variant spelling duta, but only two of dva in 9.25 and 10.9,85 where, however, it scans as two morae (i.e.  $d(u)va \sim 0$ ). The spelling duva significantly also occurs in line 3 of the Old Khotanese document in very early Documentary Script and Archaic Orthography D.R. 01 (see § 1.2).

2~ula 'camels' is the only Old Khotanese occurrence of the word besides the accusative singular  $ul\ddot{a}$  in IOL Khot Wood 8 1, 4.86 These occurrences show that the initial vowel is short, in agreement with the spellings in the Late Khotanese documents from the Khotan region, and solve the ambiguity of the Late Khotanese spellings ula-,  $\bar{u}la$ - in the Dunhuang manuscripts, which no longer distinguish between short u and long  $\bar{u}$ .87 That u and  $\bar{u}$  are accurately distinguished in 90-YKC-040 can be seen from the careful spellings 4 durne 'bows' as against 5  $p\bar{u}rna$  'arrows'.

#### Morphology

The document provides some new information concerning the morphology of nouns of the -a- and  $-\bar{a}$ - declensions.

All words that can be read are in the nominative-accusative plural and most nouns are -a-stems. In Khotanese, most -a- nouns end in -a in the nominative-accusative plural (for instance, 2 ula and 5  $p\bar{u}rna$ ), <sup>88</sup> but many of them end in short -e [e]. Correspondingly, most nouns of the secondary -aa- declension have  $-\bar{a}$  (contracted from -a- + -a), but some have long -e [e:] (contracted from -a- + -e). <sup>89</sup> The -a- and -aa- stems with nominative-accusative plural -a and  $-\bar{a}$  are masculine, while those with -e ([e] and [e:]) are described as 'neuters' by Manu Leumann and Ronald E. Emmerick. These are well represented in the texts and include, amongst others, the -a- stems  $k\bar{t}ra$ - 'act, deed', data- 'wild beast', and prahona- 'garment' and the -aa- stems  $\bar{a}staa$ - 'bone' and  $sp\ddot{a}taa$ - 'flower'. <sup>90</sup>

The occurrence, for the first time in Old Khotanese, of the nominative-accusative plural forms 7 *namate* '(pieces of) felt' from *namata*- and 3 *pase* 'sheep' from *pasa*- indicates that these -*a*- stems are 'neuter' too. <sup>91</sup>

Old Khotanese final -e [e] is preserved as -e in Late Khotanese but may be also spelled  $-\ddot{a}/-i$  (and even -a in the latest texts). Old Khotanese final  $-\ddot{a}$ , -i, and -u coalesced in a single central vowel in Late Khotanese. This is variously spelled  $-\ddot{a}/-i/-e$  (and even -ai in the latest

85. See Leumann 1933–1936: 444 s.v. *duva* and Emmerick 1967: 34.

88. On the gender of  $p\bar{u}rna$ - (not  $p\bar{u}rn\bar{a}$ -) see Emmerick in Studies 3.101 with reference to Dict. 245.

<sup>83.</sup> See Dict. 236–237 s.vv. *pätāy*- and *pätāly*-, 236 s.v. *pätām*-.

<sup>&</sup>lt;sup>84.</sup> Cf. SGS 87 s.v. *pyū*ṣ-.

Ed. and trans. Catalogue 561–562.

<sup>87.</sup> Cf. Dict. 40 s.v. *ula-*, *ūla-*.

<sup>89.</sup> Cf. Emmerick and Maggi 1991: esp. 68–69.

See Leumann 1933–1936: 386 and the relevant entries on pp. 411, 440, 467, 398, 515, and Emmerick 2009: 385; cf. SGS 265 § 12 (vii), 299 § 70 (iii).

<sup>&</sup>lt;sup>91.</sup> Cf. Dict. 173 s.v. *namata* and 224 s.v. *pasä*.

texts) but is kept basically distinct from Late Khotanese -a < Old Khotanese -a and short -o [o], though exceptions obviously occur, especially in late texts. 92

We know that the Late Khotanese words *pase* (SI P 136.1 v1),  $^{93}$  *pasi* (SI P 94.23 5, 8 and Or. 6400/2.2 7),  $^{94}$  and *namatä* (Dh 18916 v10, IOL Khot Wood 1 a5, SI P 103.3 2, and SI P 103.28 4) $^{95}$  were inflected as 'neuters' because they end in  $-\ddot{a}/-\dot{i}/-e <$  older -e rather than -a. They are all plural as confirmed by the clearly plural adjectives or numbers higher than 1 accompanying them and, thus, certainly stand for the nominative-accusative plural of the words in question.

Of course, a Late Khotanese spelling such as *pasi* is ambiguous because it can represent not only the nominative-accusative plural, but also other cases in the singular that were kept distinct in Old Khotanese. Thus, for instance, pasi is clearly accusative singular < Old Khotanese \*pasu in pasi śau 'one sheep' (Or. 6400/2.2 6, 96 beside one of the occurrences of plural pasi quoted above). However, ambiguity is reduced, as far as number is concerned, in the case of *namata*- 'felt' in that the Late Khotanese nominative-accusative plural *namatä* < namate contrasts with the accusative singular nama < \*namatu by the common loss of Old Khotanese final -tä/-ti/-tu (cf. the Late Khotanese nominative singular nā 'nāga, serpent demon' as against nominative-accusative plural *nāta*). 97 In documents, Late Khotanese *nama* is accompanied by the number 'one' in Dh 18916 v5, 7, 8, SI P 103.20 1, 2 (figure 1), IOL Khot 140/1 (Ch.cvi.001) a24, and SI P 94.23 7 (numeral śau). A similar contrast between apocopated singular forms and an unapocopated plural due to different developments in Late Khotanese can be observed, for instance, in singular thau ~ plural thauna, both from Old Khotanese thauna- '(measure of) cloth'. The Late Khotanese nominative, accusative, and genitive-dative singular thau < \*thaum < Old Khotanese nominative thonä, accusative thaunu, and genitive thauni contrast with the nominative-accusative plural thauna < Old Khotanese thauna: cf. śau maunai thau sti 'for me there is one measure of cloth' (SI M 15.2 r2, nominative singular), thau hauḍā 1 'he gave cloth 1' (SI P 94.9 2, accusative singular), and misti thau dva thauna 'two pieces of large cloth' (SI P 103.4 8, genitive-dative singular and nominative-accusative plural). 99 The exceptional nama haudä 2 'he gave felt 2' (SI P 94.23 2)<sup>100</sup> is likely to be an inaccuracy of the scribe.

Different from 7 namate '(pieces of) felt' and 3 pase 'sheep' is the case of 4 durne 'bows', as this is in all likelihood the regular nominative-accusative plural ending of a feminine stem in  $-\bar{a}$ . The word is generally assumed to be an -a- declension masculine, but the evidence for positing a masculine stem durna- is feeble. Old Khotanese durna only occurs in Book of Zambasta 24.279 in a series of similes comparing the rules of discipline and the religious practices established by the Buddha with the protective equipment and

<sup>&</sup>lt;sup>92.</sup> Cf. Emmerick 1979: 244.

<sup>&</sup>lt;sup>93.</sup> Ed. SDTV 3.160.

Ed. SDTV 3.104 and Catalogue 17.

<sup>95.</sup> Ed. Kumamoto 2007: 150, Catalogue 557, and SDTV 3.135, 147.

Ed. and trans. Catalogue 17.

<sup>&</sup>lt;sup>97.</sup> SGS 265 § 12 (viii).

<sup>&</sup>lt;sup>98.</sup> Ed. Kumamoto 2007: 150, SDTV 3.143, Catalogue 321, and SDTV 3.104.

<sup>&</sup>lt;sup>99.</sup> Ed. and trans. SDTV 3.215, 99, 136. For the Old Khotanese occurrences see Leumann 1933–1936: 439–440 and Skjærvø 2004: vol. 2, 277–278.

<sup>&</sup>lt;sup>100.</sup> Ed. and trans. SDTV 3.104.

weapons of a warrior. It has so far been taken as a nominative-accusative plural, 101 but such an interpretation is at variance with the Late Khotanese genitive-dative singular duñe in kuysye duñe māṇamdūm 'resembling a bent bow' (Siddhasāra 21.3 Ch. ii.002 128v4), 102 whose unambiguous ending -ie (which palatalises n to ñ) unquestionably assigns the word to the -ā- declension. The stem is, thus, durnā- and Old Khotanese durna is its regular nominative singular: haṣṭa śśäkṣāvatā bamggāmu padande . smṛtty-upasthāne durna samya-prahāṇa / pūrnānu bājo rāddhā-pāta kho hālśte 'He fashioned the eight śikṣāpadas [precepts] as armour. The smṛtyupasthānas [applications of mindfulness] are the bow, the samyakprahāṇas [right efforts] are instead of arrows, the ṛddhipādas [bases of psychic power] like spears' (Book of Zambasta 24.278–279). 103 The only other Old Khotanese occurence of the word in durnānu ṣparggā 'There is a discharge of bows' (Book of Zambasta 24.410) 104 is irrelevant to gender because the genitive-dative plural ending -ānu is shared by -a- and -ā- stems.

All the remaining occurrences can be explained as forms of the corresponding Late Khotanese stem  $d\bar{u}(r)n\bar{a}$ : (1)  $durn\ddot{a}$ ,  $d\bar{u}ni$ , and  $d\bar{u}na$  in  $durn\ddot{a}$  vara 'over to bow' (IOL Khot 160/1 [H. 143 NS 72] v2), 105  $para\acute{s}ai$  bairai  $d\bar{u}ni$  'He should carry an axe, bow',  $k\bar{a}dana$   $b\bar{a}r\bar{i}$   $d\bar{u}na = k\bar{a}dara$  bere  $d\bar{u}na$  'He should carry a sword, bow' (Sudhanāvadāna 297 A 113–114, C 170–171 = P 258–259), 106 and hastā vā bāyara .  $d\bar{u}na$  ra  $js\bar{a}m$  rr $jjs\bar{a}$   $p\bar{u}na$  'bring me an elephant and also a bow, sharp arrows!' ( $R\bar{a}mayana$  P 2801 41) 107 are accusative singular with  $-\ddot{a}i$  and, basically, -a < Old Khotanese short -o [0] 108 (as well as Old Khotanese -a due to pressure from the nominative); (2)  $d\bar{u}nai$  in byiha  $d\bar{u}nai$  hame 'it is a hunting bow' (Turkish-Khotanese wordlist [3] P 2892 167) is nominative singular with -ai for  $-\ddot{a}/e$  due to influence of the -i- declension or more likely as a late spelling for Old Khotanese -a; and (3)  $dun\ddot{a}$  in  $dun\ddot{a}$   $h\bar{v}v\bar{v}$  thama hame 'it is the  $thamn\ddot{a}$  of the bow' (Turkish-Khotanese wordlist [8] P 2892 170) 109 is genitive-dative singular with the non-palatalising ending  $-\ddot{a}/i$  occasionally found, also with stems usually showing palatalisation, instead of regular  $-\dot{a}$  in Late Khotanese ( $-\ddot{a}$  is already found in Old Khotanese). 110

Finally, the Late Khotanese  $-k\bar{a}$ - derivative in  $brrauk\bar{a}lqk\bar{\imath}ja\ dunaka$  'the arch/bow of the eyebrows' (*Lyrical poem* P 2025 66;<sup>111</sup> cf. Sanskrit  $bhr\bar{u}$ -mandala- 'arch of the eyebrow',  $bhr\bar{u}$ -cāpa- 'bow of the eyebrows [discharging glances as arrows]'<sup>112</sup>) should accordingly be assigned to a feminine stem  $dunak\bar{a}$ - 'bow' from  $durn\bar{a}$ -. The derivative shows regular shortening of the stem final  $-\bar{a}$ - of the base lexeme as in Late Khotanese  $b\bar{\imath}sa$ - from  $b\bar{\imath}sa$ -

<sup>&</sup>lt;sup>101.</sup> Leumann 1933–1936: 330, 444 (misinterpreted as 'arrows', with a query in the glossary), KT 6.121, Emmerick 1968: 393, Dict. 162.

<sup>&</sup>lt;sup>102</sup> Ed. KT 1.60; Emmerick's unpublished translation.

<sup>&</sup>lt;sup>103</sup>. Ed. and trans. (slightly modified here) Emmerick 1968: 392–393.

<sup>&</sup>lt;sup>104</sup> Ed. and trans. Emmerick 1968: 400–401.

<sup>&</sup>lt;sup>105.</sup> Ed. and trans. Catalogue 358.

<sup>&</sup>lt;sup>106.</sup> Ed. and trans. De Chiara 2013: 25, 36, 48, 131.

<sup>&</sup>lt;sup>107.</sup> Ed. KT 3.67.

Cf. Emmerick and Maggi 1991: 70.

Ed. and trans. Emmerick and Róna-Tas 1992: 204, 206.

<sup>110.</sup> Cf. SGS 271 §§ 19 (i–ii) on the accusative singular  $-\ddot{a}/i$ , -a < earlier -o, -a and 18 (ii–iii) on the nominative singular -ai for  $-\ddot{a}/e$ , and 273 § 20 (ii–iii) on the genitive-dative singular in  $-\ddot{a}/i$ . See also Sims-Williams 1990: 282–283 on the nominative ending -a used for the accusative (-o) in Old Khotanese.

Ed. KT 3.47.

<sup>&</sup>lt;sup>112.</sup> MW 726 s.v. *bhrū*-.

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This shortening can be compared with the one observed in Khotanese *palaā*- 'banner' ← Prakrit *paḍākā*- < Sanskrit *paṭākā*- (SGS 300 § 74) and Khotanese *brīyaā*- 'love' and *śśäḍaā*- 'goodness' < Old Iranian \**friya-tā-kā*- and \**srīra-tā-kā*- respectively (Sims-Williams 1990: 281, who concludes that 'the Khot. contracted declensions in fact include no stems ending in two long vowels'). Cf. Degener 1989: 190 s.v. *dunaka*- (allegedly masculine; cf. Emmerick 1996: 118 n. 7), 194 s.v. *bīśakā*-, and 196 s.v. *rrīnakā̄*- (!).

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